

**MBNMS Research Activity Panel
Meeting Summary
March 8, 2013**

Host: Sean Hayes for Steve Lindley – Estuarine Ecology (NOAA Fisheries Service)

Location: NOAA Fisheries Service
110 Shaffer Road
Santa Cruz, CA

Date: Friday, March 8th, 2013; 9:00 am to 12:00 pm

Members:

	Discipline	Primary/ Alternate	Name	Institution
X	Research Coordinator		DeVogelaere, Andrew	Monterey Bay National Marine Sanctuary
	Biological Oceanography	primary	Kudela, Raphael	University of California, Santa Cruz
	Biological Oceanography	alternate	Chavez, Francisco	Monterey Bay Aquarium Research Institute
X	Deep-Sea Ecology	primary	Cailliet, Greg	Moss Landing Marine Laboratories
	Deep-Sea Ecology	alternate	Haddock, Steve	Monterey Bay Aquarium Research Institute
	Estuarine Ecology	primary	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
	Estuarine Ecology	alternate	Lindley, Steve	NOAA Fisheries Service
	Fisheries	primary	Grimes, Churchill	NOAA Fisheries Service
	Fisheries	alternate		
X	Marine & Coastal Geology	primary	Storlazzi, Curt	United States Geological Survey
	Marine & Coastal Geology	alternate	Paull, Charles	Monterey Bay Aquarium Research Institute
	Marine Conservation Biology	primary		
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
	Marine Policy	primary	Abeles, Adina	Center for Ocean Solutions
X	Marine Policy	alternate	David, Aimee	Monterey Bay Aquarium
X	Nearshore Ecology	primary	Lindholm, James †	California State University Monterey Bay
	Nearshore Ecology	alternate	Carr, Mark	University of California, Santa Cruz
	Physical Oceanography	primary	McPhee-Shaw, Erika	Moss Landing Marine Laboratories
X	Physical Oceanography	alternate	Ramp, Steve	Soliton Ocean Services, Inc.
	Shelf & Slope Ecology	primary		
	Shelf & Slope Ecology	alternate		
X	Social Sciences	primary	Pomeroy, Caroline	California Sea Grant Extension Program
	Social Sciences	alternate	Scorse, Jason	Monterey Institute of International Studies
X	Water Quality	primary	Hunt, John	University of California, Davis
	Water Quality	alternate	Epel, David	Hopkins Marine Station

*Sanctuary Advisory Council Member: Research (Primary - vacant)

†Sanctuary Advisory Council Member: Research (Alternate)

RAP Coordinator:

X	Burton, Erica	Monterey Bay National Marine Sanctuary
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GUESTS:

Hayes, Sean	NOAA Fisheries Service
Moye, Flower	California State University Monterey Bay

CONSENT ITEMS

Introductions/Modifications to the Agenda (Lindholm)

HOST PRESENTATION AND DISCUSSION

Impact of Avian Predators on Salmonids (Sean Hayes/NOAA Fisheries)

- Sean Hayes presented research on seabird predation of salmonids at local creeks, rivers, estuaries
- Through salmonid PIT tagging studies, seabird predation estimated
- Scott Creek predation: how much can a few birds really eat?
 - 1939 kJ/d; salmonid is 47 kJ/stealhead, therefore 41 steelhead/day
 - In 3 months 2 ducks (Mergansers) could eat 6000 steelhead
- Many tags found on upper deck of Ano Nuevo island (~300-400)
- Temperature data loggers showed warm blooded predators consumed salmonids
- Local gull populations are increasing; salmon populations decreasing (same time period)
- Gull diet subsidized with garbage dump food
- Investigating changes in gull diet over last 100 years (C:N ratios)
 - Early 1900s: marine based diet
 - Last 30 yrs variable diet, subsidized by human waste
- 30-50% juvenile salmonids consumed by western gulls (in last 100 feet of stream!)
- Predation not listed as concern in salmonid recovery plan
- Marine survival is underestimated

PRESENTATIONS REQUESTED BY RAP

Discussion and Action Item: Review Draft RAP Protocols for Interacting with MBNMS SAC, other SAC Working Groups, and Staff (Lindholm and DeVogelaere)

- Andrew DeVogelaere summarized the issue, and provided strawman protocols for RAP review
- RAP reviewed strawman protocols, provided comments/edits
- RAP revised protocols and approved as follows (in italics):
 - *Research Activity Panel Protocols for Interacting with MBNMS SAC, other SAC Working Groups, and Staff*
 - *The RAP will review, comment and advise on issues and documents upon request from the SAC or MBNMS staff*
 - *The RAP will focus their reviews on the research and science aspects of the issue or document*
 - *In response to requests, the RAP may have experts on the panel willing to review topics, may suggest colleagues willing and capable of providing*

reviews, or may provide a list of relevant literature on the topic. Since the RAP is a voluntary body, for extensive reviews, it may simply provide a list of capable scientists and research organizations with whom the SAC or staff can arrange contracts

- *MBNMS staff benefit greatly from requests to individual RAP members on a variety of small-scale issues*
- *The RAP may also convey requests to the SAC or staff through the RAP Chair, particularly for issues relevant to the research community*
- New protocols added to the “RAP Policies”:
http://montereybay.noaa.gov/sac/rap/history/rap_policies.html

2013 California Political Outlook for Ocean Issues (David)

- Aimee David provided overview of marine policy issues relevant to California government in Sacramento and to Monterey Bay Aquarium (MBA)
- MBA brief update and info:
 - Center for the Future of the Oceans (CFFO) is no longer; now all under Monterey Bay Aquarium’s Conservation and Science
 - Margaret Spring, who recently served as Principal Deputy Under Secretary for Oceans and Atmosphere and Chief of Staff at the NOAA, has been named Vice President of Conservation and Science at the Monterey Bay Aquarium; In her new position, she will oversee the aquarium’s research programs involving sea otters, great white sharks, Pacific bluefin tuna and other species, as well as the Seafood Watch program and ocean policy outreach efforts
 - In contrast: Center for Ocean Solutions (COS) is primarily a Stanford program; a collaboration among Stanford Woods Institute for the Environment and Hopkins Marine Station of Stanford University, Monterey Bay Aquarium, and Monterey Bay Aquarium Research Institute
- MBA policy priorities
 - Implement MLPA (now fully implemented); so now focusing on monitoring and enforcement of California state marine protected areas
 - Improve ocean governance
 - Protect key (to MBA) species (otter, tuna, shark); which are those under MBA care and with MBA expertise
 - Promote sustainable seafood
- In California: big picture outlook
 - Generally good outlook for ocean issues
 - Persistent environment/economy tension
 - Funding, cautiously optimistic
- Potential funding on horizon
- Legislature:
 - Largest freshman class (since 1960s)
 - Democrat supermajority
 - “Moderate” Democrats
 - CEQA reform

- Ocean-related Bills:
 - Marine debris: *bill under construction to address producers of single-use plastics*
 - Climate adaptation
 - Coastal trust fund
 - Water bond
 - CEQA reform
- Administration: good track record (Governor Brown)
 - MLPA
 - Strong senior officials
 - Prop 30 (tax increase on high income earners; sales tax increase)
 - Focused on economy
- Administration: strong framework
 - Ocean Protection Council (*2012-2017 contingency plan*)
 - Science-based decisions
 - Climate change
 - Sustainable fisheries
 - Land-based impacts
 - Emerging ocean issues
- White Shark
 - Petition to list Northeastern Pacific White Shark on CESA
 - MBA providing data and expertise
- West Coast Governors' Agreement on Ocean Health
 - 850k federal funding in 2013
 - Marine debris
 - Data network
 - Sea level rise adaptation
 - Ocean acidification
 - Regional planning body
- Summary of Themes
 - Opportunity to advance ocean issues, but not top priority
 - Economic growth/jobs dominant force
 - Administration looking to lead
 - New class in legislature
 - Ocean-related issues: climate adaptation and ocean acidification; marine debris; CEQA reform; data management

MEETING UPDATES

State of the California Central Coast Symposium (Lindholm)

- James Lindholm provided overview of recent symposium
- Symposium description: The State of the California Central Coast is a public symposium that offers resource managers, policy makers, stakeholders and scientists an opportunity to reflect on the first five years of marine protected area (MPA) monitoring and management in California's Central Coast region - the first region to implement MPAs

under the Marine Life Protection Act. This symposium will also look ahead to informing adaptive management of the Central Coast MPA network.

- 2.5 day meeting held 27 February – 1 March 2013, at Marriott Hotel in Monterey
- Several RAP members attended symposium
- Goal: discuss enforcement, education, management, science and share monitoring results
- Great coming together of large group of scientists and policy makers
- Each region received 4 million for science/monitoring
- 2 summary booklets produced
- <http://monitoringenterprise.org/where/centralcoast.php>

STAFF REQUESTS TO RAP

Spatial Knowledge of Research Activities in MBNMS (DeVogelaere)

- Andrew DeVogelaere asked the RAP for feedback on the following:
 - Should the RAP (over time) discuss specific geographic areas of sanctuary in terms of research activities
- Focusing discussions on geographic areas of sanctuary could help with various MBNMS issues (sentinel sites, SESAs, EFH)
- Perhaps discuss one site, or group of sites, per RAP meeting, where an area is kicked off at RAP meeting with presentation, discussion, and post-meeting homework
- Could group themes for discussion, e.g. canyon heads
- RAP could ask colleagues/institutions for input

SUGGESTED FUTURE AGENDA ITEMS

- Sept/Nov 2013 meeting: regional water board on assessment of monitoring data for 12 years at coastal confluences (30 streams/rivers); report written July 2013; (per Hunt)
- SESA: GIS tool demonstration (by Chad King)
- CeNCOOS update (per Ramp)
- What is going on at big NOAA (leadership changes), and how affects little NOAA (MBNMS)? (per Cailliet)

Future Agenda Items (running list):

- Desalination update:
 - Update on fresh water supply, desal, waste water management
 - Competing Moss Landing desal proposals (CalAm, DeepWater, People’s)
 - Including Cambria
- MBNMS Updates:
 - Sanctuary Ecologically Significant Areas (SESAs)
 - Integrated Ecosystem Assessment (IEA)
 - Natural Resources Assessment (NRA)
- Results of sand mining plant study (Scorse)
- Results of Pleasure Point Surf property value (Scorse)
- Trawling study report results (Lindholm; final due end Dec 2012)
- CeNCOOS update from Leslie Rosenfeld (Ramp)
- WQ monitoring web portals: Ocean Health for CA (Hunt)

2013 RAP Meeting Schedule and Locations

Date	Host	Location
January 11	Lindholm	CSU Monterey Bay
March 8	Lindley	NOAA Fisheries Santa Cruz
May 10	Scorse	Monterey Institute of International Studies
July 12		
September 13	David	Monterey Bay Aquarium, Bing Boardroom
November 8	MBNMS	Sanctuary Exploration Center, Santa Cruz
